IN THE SPECIFICATION

Page 4, line 13

The location of the selected zoom area once defined can be static in order to fix the zoom window on one region of the display or locked to the movement of any user input through an input device (keyboard, absolute or relative pointing device, e.g. mouse). This user input may further includes a cursor control device input used to control a cursor, and the portion of the main surface memory to be scaled and output is caused to be dragged or moved over the main surface memory by movement of the cursor.

E1

Page 7, line 28

Figure 2 shows a flow chart for the embodiment illustrated in Figs. 4 and 5. When the end user enables the zoom using a hotkey (H1) or the like in step 100, the software allows the user to select a rectangular window from the primary display in step 101. ~~Once the zoom operation is enabled, the hotkey is also detected (step 100') to determine if the zoom operation should be disabled (step 113).~~ One example of this could be that the user holds down the mouse key at which point the coordinates of one corner of the zoom window are determined. The user then drags the mouse while holding down the key and stops at the corner diagonally opposite the first one to specify the rectangle and lets go of the key. At this point the coordinates of the corner diagonally opposite the first one are determined and this information is enough to specify the size and location of the zoom window. Of course, there are many other ways to determine this rectangular area without departing from the spirit and scope of the invention. The coordinates of the zoom window (including address in memory) are thus stored. As illustrated in Fig. 2, the coordinates of the zoom window are sent to the display driver in step 102.

E2

Page 8, line 10

The resolution of the destination can be either automatically calculated or user defined (step 103). When it is user defined, the software uses this resolution (step 104). In the preferred embodiment, it is automatic, it could be chosen in a variety of ways ranging from (but not limited to) the closest standard resolution (to the resolution of the zoom window) to the largest resolution possible etc. These resolutions determination options

E3

can also be specified by the user. Once the destination resolution is chosen, the scaling factor is determined (step 106). This determination of the scaling factor is within the general knowledge of those in skilled in the art.

E3

Page 10, line 13

Figure 4 ~~5~~ shows a representation of the hardware in an embodiment using 3D drawing engine 60 and two zoom buffers. The area selected in the main display buffer in memory 50 is scaled and written into the zoom buffer by the 3D drawing engine 60. Figure 4 ~~5~~ illustrates double buffering so two zoom buffers have been shown. In this case, the drawing engine 60 alternates between the two buffers. Meanwhile CRTC2 12 reads from the buffer that the drawing engine 60 has finished writing and while the drawing engine 60 is updating the other buffer. This is done to prevent unnecessary flickering that may occur with single buffering and to ensure that the drawing engine has completely updated the zoom buffer from which the CRTC2 12 is reading.

E4

Page 11, line 12

Step 110 determines if filtering has been enabled or not. If so, a selected region is scaled using the 3D drawing engine texture mapper into the appropriate zoom buffer using filtering for ach pixel (step 111). If filtering has not been enabled, a selected region is scaled using the 3D drawing engine texture mapper into the appropriate zoom buffer without any filtering. Once the zoom operation is enabled, the hotkey is also detected (step 100') to determine if the zoom operation should be disabled (step 113). Alternatively to using the 3D drawing engine 60, the backend scaler of CRTC2 12 can also be used to scale the zoomed window (see Figure 8). The CRTC2 12 is set to read from the location where the zoom window is located and the scaler is programmed to scale using the determined scale factor. The zoom window can be fetched directly from the main display buffer or the zoom window can be copied (blit) into another region in memory and the CRTC2 (12) can read from there (see Figure 8). In this case, the control of filtering and non-filtering, will depend on the filtering capabilities of the specific scaling unit used.

E5